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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,675	11/18/2003	Peter Andersson	0119-167	2321

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POTOMAC PATENT GROUP, PLLC  
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EXAMINER
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PAN, YUWEN

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/714,675

Applicant(s)

ANDERSSON, PETER

Examiner

Yuwen Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) 35-53 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-34 and 60-75 is/are allowed.
- 6) ☒ Claim(s) 55-58 is/are rejected.
- 7) ☒ Claim(s) 59 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-34, 55-59, and 60-75 in the reply filed on 11/28/06 is acknowledged.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Gambina et al (US006393258B1).

Per claim 55, Gambina discloses an apparatus (see figure 1) for determining which setting of a plurality of device input compensation settings provides a calibration setting of minimum of unwanted signal at an output of the device, comprising: a signal generator (see column 9 and line 50) for generating a test signal (TXI, TXQ) supplied to an input of the device (DTF); means for setting the device to one of a plurality of device input compensation settings (DCI, DCQ, column 6 and lines 54-60); means for measuring a level of unwanted signal output from the device (see column 6 and line 61-column 7 and line 15); and a processor (BTR) for determining, for each measured compensation setting, a corresponding distance from the measured compensation setting to a calibration setting resulting in minimum unwanted signal level (P1, P2 and P3), said determination being based on the measured level of the unwanted signal and a predetermined characteristic of the unwanted signal, and for determining the calibration setting based on the

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measured settings and the determined distances (see columns 7 and 8, shows that sample points are selected and the corresponding power level is determined in order to find the constant values a, b, and c. such parameters are utilized to find a closest point to the reference point in other word, a minimum distance to the reference point).

Per claim 56, Gambina further teaches that a memory for storing the determined calibration setting and the measured unwanted signal (see column 9 and lines 34-43).

Per claim 57, Gambina further teaches that a comparator for comparing each measured level of unwanted signal with a predetermined threshold value (see figure 1 and item MS).

Per claim 58, Gambina further teaches that each compensation setting corresponds to at least one type of compensation selected from DC offset, phase difference, and amplitude imbalance (see column 1 and lines 37-51).

***Allowable Subject Matter***

4. Claim 59 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art of record doesn't teach calculating a sum of distance errors for each compensation setting not measured.
5. Claims 1-34 and 60-75 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter:  
prior art of record doesn't teach determining a two-dimensional compensation setting based on at

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least two measurements at knowledge about characteristic function that describes the input-output relationship of the device to be calibrated. And the steps that are claimed in both independent claims 1 and 60 contain allowable subject matter and there further their depend claims are allowable too.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Darabi et al (US006968019B2) discloses an IF FSK receiver. Paulus (US007142835B2) discloses an apparatus and method for digital image correction in a receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anderson D. Matthew can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Yuwen Pan

February 16, 2007